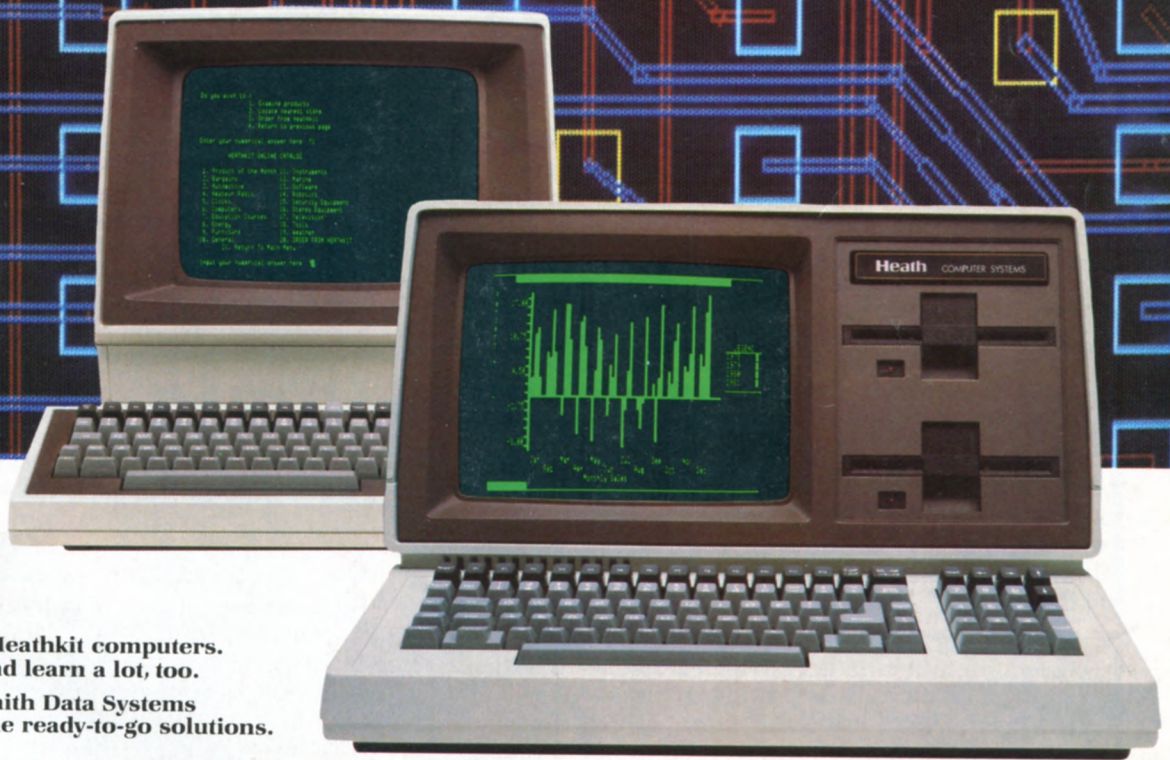


Heathkit

Computer Systems



Money-saving
computer hardware
and software solutions

Featuring:

Heathkit Easy-to-build Heathkit computers.
Save money and learn a lot, too.

Zenith Data Systems Assembled Zenith Data Systems
computers. The ready-to-go solutions.

Mail Order Computer Catalog No. 801MO

Heathkit[®]

Helping you compute better

The right choice now, and in the future – the 16/8-bit kit or

Experience sophisticated, incredibly fast 16-bit software – with the ability to run most existing Heath/Zenith 8-bit software programs! (Software programs sold separately.)

Has 16-bit 8088 and 8-bit 8085 microprocessors, four IEEE-696 (S-100) expansion slots, built-in 5.25" disk drive and more – all in a single, compact housing!

Our most powerful desktop computer has what you need to compute today – and tomorrow, too!

The H/Z-100 includes two sophisticated microprocessors, 768 KB Random Access Memory (RAM) capacity, an industry-standard S-100 expansion bus, a 5.25-inch floppy disk drive with expandability, easy-touch keyboard and low-maintenance design – all in a durable earthtone-color cabinet!

Offers outstanding performance for everyone: Those with little or no computer experience will appreciate the H/Z-100's ease of operation and the time-saving, money-saving advantages it provides. Those with programming experience and the need to use more advanced languages will enjoy this computer's power and versatility.

Dual microprocessors to run more advanced software: To run today's higher-speed, higher-performance 16-bit software programs, you need an H/Z-100. Its advanced 8088 microprocessor makes a significant difference by processing information in great detail with astonishing speed.

Most existing programs won't become obsolete either: The H/Z-100 Computer also handles 8-bit software programs with an 8085 microprocessor – including many current Heath/Zenith programs.

Many software programs now available: Choose both 16-bit and 8-bit Heath/Zenith software for the H/Z-100. See 16-bit programs, including the Z-DOS Operating System, Z-BASIC Color Language, word processing and Microsoft's Multiplan Spreadsheet, on pages 6-7. Eight-bit software is on pages 20-31.

Most models have 192KB of RAM to handle larger software programs: You get real power to answer bigger, more comprehensive questions. RAM can be expanded to over $\frac{3}{4}$ of a megabyte (768K bytes) – compared to a 64K RAM standard for many desktop computers.



Built-in 5.25" floppy disk drive stores up to 320K bytes of data on a single disk; optional, external 8" disk drives can be added.

Second built-in drive slot accommodates 11-megabyte Winchester disk drive or second 320 KB 5.25" drive.

An 18-key numeric pad (with cursor control keys) lets you enter numeric data, perform calculations in a fast and easy manner.

Supports video graphics for vivid presentations: You get the high-impact graphics capability that many business presentations demand. You can create charts, graphs and symbols for reports and other documents on the 640 x 225 pixel screen.

Designed to grow as your computing needs grow: There are four industry-standard IEEE-696 (S-100) card slots available for internal expansion, allowing you to add more memory and peripherals as your needs change. This allows your investment to grow, and decreases the chance of obsolescence.

Total communications flexibility: Three input/output (I/O) ports let you access a world of information. Two RS-232C serial ports and one parallel port provide almost limitless capabilities. Use printers; or with a modem and telephone, communicate with other computers, word processors, data banks, printers and other communications devices.

High-capacity disk drives: A built-in 5.25-inch floppy disk drive provides 320K bytes of on-line data storage capacity. For more on-line storage capacity, add a second 5.25" drive (page 4).

Up to 2.5 megabytes of std. floppy disk storage now available: The Z-207 Floppy Disk System (page 4), comes with one or two 1.25 megabyte drives.

Optional Winchester disk drive provides built-in big job capacity: Replacing a 5.25" drive, the Winchester drive provides multi-megabyte data storage capacity needed for big jobs that used to need an expensive mini-computer. See page 4.

Heathkit versions are easy to build! Step-by-step manuals show you how. Many components are pre-assembled for faster kitbuilding. 120/240 VAC.

assembled H/Z-100, now with 192KB RAM in most models!


Screen displays 24 lines of 80 characters, plus 25th line of user information – or 225 graphic lines of 640 dots.

The H/Z-100's decorator tan and brown earthtone colors, state-of-the-art cabinet design blend well into most any decor scheme.

Sculptured typewriter-style keyboard features 95 keys, enlarged "return" and "enter" keys, 13 user-programmable special function keys for added convenience.

Choose the low-profile or all-in-one H/Z-100 Computer, in kit or assembled form, that matches your computing needs.


Low-Profile (above, left): Add ZVM-122, 123 or 135 Displays (p. 16; ZVM-135 needs Z-219-1 Color RAM on some models). 7½" H x 19" W x 19½" D.


 **ZF-110-22**, Assem. w/color, 128KB RAM and two 5.25" disk drives, 62 lbs. **3499.00**




Built-in 5.25" floppy disk drive stores up to 320 KB on-line; add internal 11 MB Winchester disk drive, another 320 KB 5.25" drive or an external 1.25 or 2.5 MB 8" floppy disk system.


The 18-key numeric pad (including cursor control keys) lets you enter numeric data, perform calculations faster and easier.


 **NEW! ZW-110-32**, Asm. w/color, 192KB RAM, 5.25" and Winchester drives, 63 lbs. **5499.00**

 **NEW! ZF-100-21**, Asm. w/mono graphics, 128KB RAM, one 5.25" drive, 49 lbs. . . **2899.00**


 **NEW! Kit HS-100-31**, w/mono graphics, 192KB RAM and one 5.25" drive, 98 lbs. . . . **2199.00**

All-In-One (above, right): 12" diag. mono video display, mono graphics – in one housing! Add Z-219-1, ZVM-135 (p. 16) for color. 13½" H x 19½" W x 19½" D.

 **NEW! Kit HSA-120-31**, amber CRT and 192KB RAM, 133 lbs. **2349.00**

 **NEW! Kit HSG-120-31**, green CRT and 192KB RAM, 133 lbs. **2349.00**

 **NEW! Kit HSW-120-31**, white CRT and 192KB RAM, 133 lbs. . . . **2349.00**

 **ZF-120-22**, Asm. w/green CRT, 128KB RAM, two 5.25" drives, 68 lbs. Mtr. Frt. **3599.00**

 **NEW! ZW-120-32**, Asm. w/192KB RAM, green CRT, 5.25" & 11 MB Winchester Disk Drives, 70 lbs., Mtr. Frt. **5599.00**



Peripherals add more capability to H/Z-100!



NEW! External 8-Inch Floppy Disk System stores up to 1.25 megabytes more data on a transportable disk

Plug-in compatibility with H/Z-100: Now you can store up to 1.25 megabytes of important data, generated by your H/Z-100 Series Computer, on a single 8-inch floppy disk. Uses soft-sectored disks, formatted in standard IBM 3740 style.

No wait to see data: Has 90 mS average access and 410 mS maximum access – with 3 mS track-to-track moves, 20 mS head settle time and 83 mS average latency. Styled in pleasant H/Z-100 earthtone colors. Kit includes easy-to-follow Heathkit building manual. 120 VAC, 60 Hz, 150 Watts. Compact – 7¾" H x 13¾" W x 2½" D.

Heathkit Kit **HS-207-41**, Disk System with one drive, Shpg. wt. 57 lbs. **999.00**

Heathkit Kit **HS-207-42**, Disk System with two drives, Shpg. wt. 69 lbs. **1599.00**

Z-207-41, Assembled Disk System with one drive, Wt. 53 lbs. **1599.00**

Z-207-42, Assembled Disk System with two drives, Wt. 60 lbs. **2299.00**

A full line of H/Z-100-compatible accessories

128KB to 192KB RAM Upgrade Kit for H/Z-100: Plug into main memory board. For even more memory, add one or two Z-205 256KB RAM Boards below.

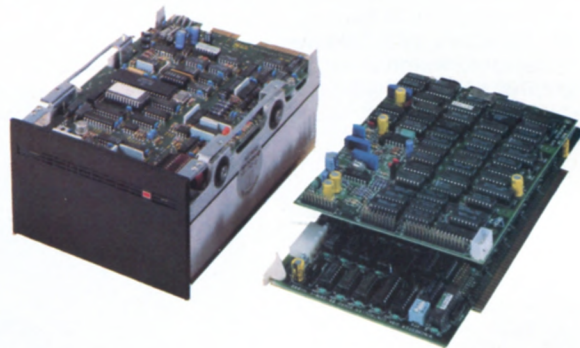
Z-205-1, Shpg. wt. 1 lb. **165.00**

NEW! 256KB RAM Board for your H/Z-100! Plugs into an IEEE-696 (S-100) expansion slot. Add two boards to expand to an astounding 704KB of RAM! Realize the benefits provided by the H/Z-100's superior memory capacity. Requires 192KB RAM (If you need to expand to 192KB, see Z-205-1 above).

Z-205, Shpg. wt. 2 lbs. **799.00**

Color Video RAM Set for HS/ZF-100, HS/ZF-120: Two sets needed for color graphics capability.

Z-219-1, Shpg. wt. 1 lb. **145.00**



NEW! Internal-mount 11 Megabyte Winchester Disk Drive gives huge storage capacity for large tasks

Installs in one of the H/Z-100's 5.25" disk drive slots: The ZS-217 Winchester Disk Drive provides the 11 megabyte data storage capacity necessary for large accounting, data base, inventory, and technical jobs that used to need an expensive mainframe or mini-computer system.

Features super-fast 85 mS average access time: An extremely high five megabytes of data transfer each second at 3600 rpm. Virtually perfect reading of data – this drive averages only one error per trillion bits read. Saves energy – draws only 23 Watts from computer power supply.

Includes all hardware needed to install in your H/Z-100 Computer: A complete Winchester Upgrade Kit is included with the Winchester Disk Drive. With the step-by-step instructions included, you can install the drive in just a few hours!

ZS-217, Assembled Winchester Disk Drive with complete Upgrade Kit for installation in H/Z-100, Available Sept., **Call for price**

Z-207-6, Low-Profile 8-Inch Floppy Disk Drive to expand HS-207-41 or Z-207-41 Disk Systems to two drives, Shpg. wt. 8 lbs. **699.00**

Z-207-3, Second 320KB 5.25-Inch Disk Drive for H-100 Computer Kits, Shpg. wt. 5 lbs. **395.00**

SAVE \$95! Buy with H-100 Kit **ONLY 300.00**

HDC-100, Dust Cover for Low-Profile H/Z-100 Series Computers, Shpg. wt. 1 lb. **16.00**

HDC-120, Dust Cover for All-In-One H/Z-100 Series Computers, Shpg. wt. 1 lb. **16.00**

HDC-207, Dust Cover for H/Z-207 External Eight-Inch Floppy Disk System, Shpg. wt. 1 lb. **16.00**

TM-100, Technical Manuals for H/Z-100 Computer (included with kits), Shpg. wt 14 lbs. **55.00**

Problem-solving H/Z-100 software packages

Heath/Zenith has the software to solve your problems now! Both fast 16-bit and proven 8-bit programs are available.



Advanced 16-bit Z-DOS™ and 8-bit standard CP/M® Operating Systems

Z-DOS – Microsoft™ MS-DOS-compatible: Run fast 16-bit programs like Multiplan, Z-BASIC. Has device-independent I/O and much more.

● **OS-63-4**, Shpg. wt. 5 lbs. **150.00**

CP/M – no planned software obsolescence: Your key to the largest base of software programs available now. Has assembler, editor, debugger.

● **OS-53-2**, Shpg. wt. 5 lbs. **150.00**

16-bit color, 8-bit BASIC Interpreters

Z-BASIC: This 16-bit color interpreter is an extended version of Microsoft BASIC below, produces beautiful color displays on capable systems. Requires Z-DOS above.

● **MS-463-1**, Shpg. wt. 5 lbs. **175.00**

Microsoft BASIC: An excellent 8-bit interpreter. Has IF-THEN-ELSE control structure, extended commands/statements, math and logical capabilities, editing more. Needs CP/M above.

● **MS-253-1**, Shpg. wt. 3 lbs. **175.00**

SAVE \$350 on Software Starter Package!

Save twice on the software needed to start: You get a big \$350 off the separate prices of the 16-bit Z-DOS and 8-bit CP/M Operating Systems, the color Z-BASIC and Microsoft BASIC Languages.

You also get \$200 in valuable coupons! Each coupon is worth \$100 off any Heath/Zenith software product costing \$150 or more!

● **HSS-100-1**, Software Starter Package, 20 lbs. \$650.00 separately, **ONLY 300.00**

PeachText® 5000 Software Starter Package

The applications programs you need to get down to business with your H/Z-100: PeachText 5000 has eight value-packed features, at one low price:

- 1. PeachText Word Processor:** Easy to learn – combines ease of use, versatility and power. Includes capabilities of Magic Wand (p. 25), including file merging and mail list management.
- 2. Spelling Proofer:** Checks spelling of files prepared with PeachText, highlighting misspelled words to help ensure a letter-perfect document!
- 3. PeachCalc:** A powerful electronic spreadsheet – use as a financial modeling and planning tool. Has capabilities similar to SuperCalc (p. 6).
- 4. List Manager –** mailing list names and addresses, SuperSort addition to PeachText.
- 5. An on-line Random House Thesaurus:** Can't think of a similar phrase? Consult this dictionary of synonyms while composing a PeachText document.

6. One box of ten floppy disks – a \$50.00 value, provided in this package at no extra charge!

7. Coupon for four free utility programs! Worth \$525 separately. Send to Peachtree® for a program to pull Peachtree Series 5 Business Accounting files, for use with PeachText and PeachCalc. You'll also get programs to convert WordStar™ and EasyWriter files to PeachText format, and VisiCalc® to PeachCalc. Package supported by Peachtree Software, Inc. of Atlanta, GA. Needs H/Z-100 with Z-DOS (left).

RS-463-75, 3 lbs. **395.00**

SAVE \$125!

For verifiable H-100 kit owners **ONLY 275.00**

SAVE 40% – buy Z-DOS, PeachText 5000 with H-100 Computer!

Best value: PeachText, Spelling Proofer, PeachCalc, List Manager, Thesaurus, 10 free floppy disks, information transfer and conversion utilities – plus ZDOS!

HSS-100-2, Z-DOS and PeachText 5000 Software Starter Package, Available only on same order with purchase of **kit H-100 Series Computer**, Shpg. wt. 18 lbs. . . . \$545.00 separately, **ONLY 325.00**

Z-DOS, Z-BASIC are trademarks of Zenith Data Systems Corp. CP/M is a registered trademark of Digital Research, Inc. Microsoft is a trademark of Microsoft, Inc. SuperSort, WordStar are trademarks of Micropro International, Inc. Peachtree, PeachText, PeachCalc are registered trademarks of Peachtree Software, Inc. VisiCalc is a registered trademark of VisiCorp.

Problem-solving, ready-to-run software for the H/Z-100 Series Computers



When you buy an H/Z-100 Series Computer, we support your purchase with ready-to-run software programs – as well as hardware and peripherals. Software is supplied in soft-sectored, 48 tpi (tracks per inch) 5.25" floppy diskette form, with a detailed operating manual included.

Easy-to-use software – you don't need a computer expert to develop software for the H/Z-100. Our off-the-shelf software combines common-sense design with plain English commands to guide you through operations which used to be highly technical in nature.

Advanced Multiplan™ 16-Bit Spreadsheet

This personal productivity tool helps you do corporate and family budgeting, make product planning and sales decisions, and much more.

Helps answer those important "what if?" and "now what?" questions: Form worksheets up to 63 columns wide, 255 rows deep. Displays proposed responses to commands and formulas – you decide whether to proceed. Sort data by column and row – highest to lowest, or in alphabetical order.

Perfect for corporate/departmental budgets – make one or several spreadsheets dependent on a master spreadsheet. And you can exchange information between spreadsheets and other applications programs. Detailed manual, on-screen help. Requires Z-DOS (p. 5).

● MS-463-7, Shpg. wt. 6 lbs. 250.00

Supercalc™ 16-Bit Electronic Spreadsheet



Features colorful video

displays: uses faster 16-bit technology, H/Z-100's larger memory

Helps you use your time and energy better: Form worksheets up to 63 columns wide, 255 rows deep. Features IF, AND, OR, NOT conditional calculations, PROTECTION of non-data fields, 127-column text buffer, 117-character formula display.

Intermix with word processing reports: Worksheets stored in standard ASCII file format. Extensive manual, on-screen HELP. Requires Z-DOS (p. 5).

● SC-463-1, Shpg. wt. 4 lbs. 195.00

WordStar™ Color Word Processor



Comes with enhanced color video displays, runs on the H/Z-100's faster 16-bit microprocessor

Specially enhanced for the H/Z-100: WordStar, Version 3.2, features new, colorful video displays – HELP is in yellow, text in green, spelling errors in red. You can also move blocks of text both horizontally and vertically – and new horizontal scroll allows documents wider than 80 characters to be displayed on the screen.

For letter-writing applications: Features full on-screen text formatting. Can also print while you work on a document. Requires Z-DOS (p. 5) and a printer (letter-quality WH-54 recommended).

● MP-463-7, Shpg. wt. 5 lbs. 399.00

MailMerge™ for WordStar

This powerful 16-bit file merging tool can help reduce your mailing costs, too.

Makes WordStar even more valuable: MailMerge, Version 3.2, enables the creation of personalized form letters and mailing labels from the same data file. You can also print the same file more than once, or specify printing of a file within text. Requires Z-DOS (p. 5), WordStar (above) and a printer (WH-54 recommended).

● MP-463-8, Shpg. wt. 5 lbs. 139.00

Condor® Series 20 rDBMS

Data base management system with powerful indexing and report writing capabilities

Even first-time computer users can enter, analyze and print data: Simplifies, speeds information processing for business functions. Can even develop a menu-driven applications system without additional software or programming.

Relational data base concept: Organize data – then use English-type commands to dynamically related unrelated data to fit your needs.

Very fast: Use 32,767 records/file, 1,023 bytes/record, 127 fields/record, 127 characters/field. Also has file indexing, report writing/printing, to manual, on-screen HELP. Needs Z-DOS (p. 5).

● **CD-463-1**, Shpg. wt. 4 lbs. **650.00**

Condor File Manager

When you need simple, disciplined organization and maintenance of your data files

Traditional file management – and more: Enter and change data on files – and sort, merge, analyze and print that data, all without previous programming experience. Special features are also available via an English-like data language.

Very fast: Has DEFINE to create new files in minutes, STAX command to view/print statistics, manual, on-screen HELP. Upgrade to Condor rDBMS when needs grow. Needs Z-DOS (p. 5).

● **CD-463-2**, Shpg. wt. 4 lbs. **299.00**

NEW! Peachtree® 16-Bit Business Software

These ready-to-run software programs, designed to use the faster 16-bit technology of the H/Z-100, can automate your financial operation – giving you more time to help your enterprise grow. Sample data for practicing is included.

These programs require the Z-DOS Operating System (p. 5). For a smooth transition, you should have a basic knowledge of computers – and consultation with an accountant or data processing professional may be needed.

General Ledger System

Speeds reporting of financial information, gives you current facts to make decisions on

Maintains your financial history: Peachtree General Ledger is the nucleus of your financial reporting system. It records all your financial transactions, generates accurate and timely balance sheets and company-wide/departmental income statements, and supplies comparative data from one year ago or established budget amounts.

Control expenses before they get out of hand:

Sixteen useful programs included. Fully links to other Peachtree business software programs.

● **RS-463-1**, General Ledger System to handle approximately 500 accounts and 2,000 transactions per month – depending on how you run your business, Shpg. wt. 5 lbs. **399.00**

Accounts Receivable System

This system tells you about problem accounts – before they become a problem

Complete invoicing/monthly statement generating system: Helps you get quicker payment, and the money you're owed on aged accounts receivable. Also saves on accounting labor costs.

Keeps account files for each customer: Generates statements, an aging report and transaction reports for each customer. Links to Peachtree General Ledger and Sales Invoicing programs.

● **RS-463-2**, Accounts Receivable System to handle approximately 200 accounts and 800 transactions per month, Wt. 4 lbs. **399.00**

Accounts Payable System

Easy-to-use software gives you automated pinpoint control of your outgoing cash flow

Keeps track of current and aged accounts payable: Puts you back in control of outgoing cash flow. Lets you pay obligations when it's best for you – take advantage of early payment discounts.

Reports generated: Transaction register, cash requirements, open invoices and invoice aging. Links to Peachtree General Ledger System.

● **RS-463-3**, Accounts Payable System to handle approximately 400 accounts and 900 transactions per month, Shpg. wt. 4 lbs. **399.00**

Inventory Control

Lets you use current information, not outdated reports, to manage your most costly asset

Improves customer service and response time: Designed to give you better merchandise control, let you decrease your inventory investment, and improve customer service and response.

Reports provided: Detail inventory, departmental inventory summary, inventory status, reorders, period-to-date and year-to-date reports.

● **RS-463-5**, Inventory Management to handle approximately 1,800 items, 4 lbs. **499.00**

Peachtree is a registered trademark of Peachtree Software, Inc. Multiplan is a trademark of Microsoft, Inc. SuperCalc is a trademark of Sorcim Corp. WordStar and MailMerge are trademarks of Micropro International Corporation. Condor rDBMS is a registered trademark of, and is marketed pursuant to a license from, Condor Computer Corporation.



H-89 Computer: Low-priced power and versatility to meet your personal and business computing needs.

Runs industry standard CP/M® software: Choose from hundreds of programs, ready to run on the H-89.

48K bytes of RAM standard: Enough memory power to perform most home and business computing functions – with built-in diagnostics. Expand to 64K RAM with the WH-88-16 RAM Expansion Set on page 10.

Dual microprocessors: The computer never has to share power with the built-in video terminal, enabling the H-89 to perform many high-speed tasks.

Built-in disk storage: 100K bytes, expandable to 640K bytes with the optional Z-89-37 Disk Controller and H-17-4 Double-Sided Disk Drive (p. 11). External disk systems (p. 11) can expand capacity to 1.92 megabytes.

Use as a professional video terminal (with appropriate software): Has H/Z-19 display functions (p. 14). 12" diagonal CRT shows 25 80-character lines. Typewriter-format keyboard, with 12-key numeric pad, prints the upper/lower case ASCII set plus 33 graphics symbols.

Control 32 terminal functions: Use reverse video (black on white) to emphasize any portion of the screen. Select baud rates up to 9600.

Save when you buy: And if you plan to use the H-89 for business purposes, ask your tax adviser about possible tax credits for possible additional savings.

The H-89 requires CP/M-80, HDOS or similar operating system software for normal operation.

CP/M is a registered trademark of Digital Research, Inc.

Heathkit

ZENITH data systems

Kit computer products with the Heathkit label are designed for home and business use, and meet all requirements of the FCC for operation in the residential environment.

Most assembled ZDS products are designed for commercial use. Operation in residential areas may require the operator to correct unacceptable interference to radio and TV reception.

H-89A SPECIFICATIONS: CPU AND MEMORY: Clock: 2.048 MHz. VIDEO TERMINAL: Character Size: Approximately 0.2" H x 0.1" W (0.51 x 0.25 cm). Character Type: Upper case and Lower case without descenders, 5 x 7 dot matrix; Lower case with descenders, 5 x 9 dot matrix; Graphics, 8 x 10 dot matrix. Keyboard: 84 keys (60 alphanumeric keys and 12 function control keys), plus a 12-key numeric/control pad. Tab: Standard eight-column tab. Edit Functions: Insert and delete character or line. Erase Functions: Erase line or page, from beginning of line/page, to end of line/page. Bell: Audible alarm on receipt of ASCII BEL. Power Requirement: 120/240 VAC. Dimensions: 13" H x 17" W x 20" D.

There's a budget-priced H-89 system that fits your needs



H-89 Home/Word Processing System

This system has 48K bytes of Random Access Memory (RAM), three EIA Standard RS-232C Serial Interface ports and 200K bytes of floppy disk storage on two single-sided 5.25-inch drives.

Order an H-89 Computer and the HS-77-1 5.25-Inch Floppy Disk System (shown on page 11).

SAVE UP TO \$985: When you buy this H-89 Computer System, you can select three software programs from the offer #1 list on page 10, with a value of up to \$985, at no extra charge! Please specify model numbers when ordering.

SAVE UP TO
\$985⁰⁰



Medium-capability H-89 Computer System

For small businesses and programmers: Has 64K bytes of RAM, 1.38 megabytes of floppy disk storage on three 5.25-inch drives and three serial ports.

Order the H-89, one WH-88-16 64K Wired Memory Expansion Board (p. 10), the Z-89-37 Soft-Sector Disk Controller Board (p. 11) and the high-capacity HS-37-2 Floppy Disk System (p. 11).

SAVE UP TO \$985: When you buy this H-89 Computer System, you can select three software programs from the offer #1 list on page 10, with a value of up to \$985, at no extra charge! Please specify model numbers when ordering.

SAVE UP TO
\$985⁰⁰



Maximum-capability H-89 System

For business and commercial applications: This system has 64K bytes of Random Access Memory (RAM), 1.92 megabytes of floppy disk storage on three soft-sector 5.25-inch drives, and three EIA Standard RS-232C Serial Interface ports.

Order the H-89, one WH-88-16 64K Wired Memory Expansion Board (p. 10), the Z-89-37 Soft-Sector Disk Controller Board (p. 11), an H-17-4 Double-Sided Disk Drive (p. 11), an H-88-9 Installation Kit (p. 11) and the high-capacity HS-37-2 Floppy Disk System (also on p. 11).

SAVE UP TO \$985: When you buy this H-89 Computer System, you can select three software programs from the offer #1 list on page 10, with a value of up to \$985, at no extra charge! Please specify model numbers when ordering.

SAVE UP TO
\$985⁰⁰

Customize an H-89 Computer to fit your unique needs

H-89 Computer Kits: A complete, easy-to-build, self-contained computer system with two eight-bit microprocessors for maximum speed and versatility. The standard system includes a built-in 12" diagonal CRT screen, 48K bytes of Random Access Memory (RAM, expandable to 64K bytes), a single-sided disk drive for up to 100 KB of on-line storage with the single-density disk controller board included (a double-density disk controller board is available on page 11 to help you expand disk storage capacity), and three serial input/output (I/O) ports to communicate with modems, printers and other peripherals.

Get up to \$985 in software at no extra charge!

You receive three programs, from a specially-selected list of eight programs, at no extra charge when you purchase an H-89. Operating systems, languages, a work processor and an electronic spreadsheet are included on the program list. See below.

Heathkit Kit HS-89-2, with 48KB RAM, 100 KB disk drive and built-in anti-glare green CRT,
Shpg. wt. 96 lbs. **\$1429.00**

Heathkit Kit HS-89-3, with 48KB RAM, 100 KB disk drive and built-in standard white CRT,
Shpg. wt. 96 lbs. **\$1399.00**



The Heathkit H-89 Computer is Class B Certified by the Federal Communications Commission (FCC) for interference-free use in homes and businesses.

Multi-Mode Interface Card: Use with RBTE (p. 24) to enable H/Z-89 and Z-90 to emulate various IBM data terminals. Also has Centronics-style I/O port, which lets the H/Z-89 and Z-90 use parallel printers like the MX-80A (p. 13). Needs CP/M 2.204 (available Aug.) or custom software.

Z-89-11, Assembled, Shpg. wt. 1 lb. **150.00**

GET SOFTWARE AT NO EXTRA CHARGE!

OFFER #1: Choose three of the eight programs below, when you purchase an H-89 Computer Kit from this catalog:

Operating Systems: Industry standard CP/M-80® and HDOS.

Languages: Microsoft™ BASIC Interpreter and Compiler, Microsoft FORTRAN and Microsoft COBOL.

Word Processor: Magic Wand saves saves time and frustration.

Spreadsheet: Versatile SuperCalc Electronic Spreadsheet makes answering "what if?" questions faster and easier.

*Offer applies only to single-quantity H-89 purchases from this catalog, not to Z-89s or Z-90s. CP/M is a registered trademark of Digital Research, Inc.

H/Z-89, Z-90 Accessories

Assembled 64K RAM Expansion Kit: Expands 48K H/Z-89s to 64K RAM.
WH-88-16, Shpg. wt. 1 lb. **115.00**

16K RAM Expansion Kit: Expand converted H-19s, older H/Z-89s in 16K increments up to 48K RAM.
H-88-2, Shpg. wt. 1 lb. **29.00**

Three-Port RS-232C Serial Interface: For older H/Z-89s.
HA-88-3, Shpg. wt. 2 lbs. **150.00**

Double-Sided Disk Drive Installation Kit: Needed to install H-17-4 Drive inside H/Z-89, Z-90 cabinet.
H-88-9, Shpg. wt. 4 lbs. **50.00**

Wire Wrapping Board w/bus connectors: Design custom circuits. Uses HCA-6, HCA-7 below.
Kit H-88-10, 1 lb. **30.00**

Wire Wrapping Kit: Tool, 50' wire, 200 pre-cut, pre-stripped wires.
Kit HCA-6, Shpg. wt. 1 lb. **13.95**

Wire Wrapping Socket Kit: 36# 3-level sockets (14- to 40-pin).
Kit HCA-7, Shpg. wt. 1 lb. **29.95**

Black Fabric Anti-Glare CRT Filter: For standard 12" CRTs.
HCA-4, Shpg. wt. 1 lb. **19.95**

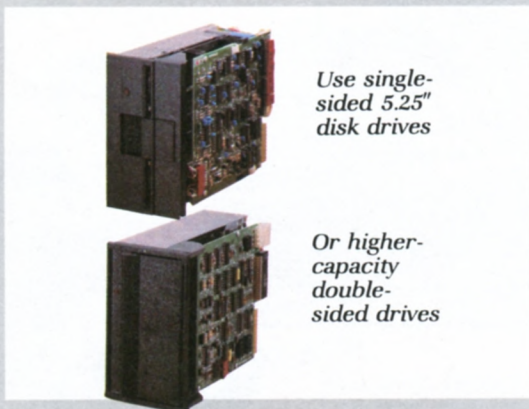
H/Z-89, Z-90, H/Z-19 Dust Cover.
HCA-5-89, Shpg. wt. 1 lb. **14.00**

H/Z-89, Z-90 Computers/5.25" Disk System Configuration Chart

System Components	Internal Disk Storage	External Disk Storage	Total Disk Storage Capacity
H/Z-89 (Note 1)	One 100 KB hard-sectored drive	—	100 KB
H/Z-89 (Note 1) H-77/Z-87 (Note 2)	One 100 KB hard-sectored drive	One or two 100 KB hard-sectored drives	200 or 300 KB
H/Z-89, Z-90 (Notes 1, 2) Z-89-37 H-17-4, H-88-9 (Optional)	One 160 KB or 640 KB internal drive	—	160 KB or 640 KB
H/Z-89, Z-90 (Notes 1, 2) Z-89-37 H-17-4, H-88-9 (Optional) H-77/Z-87 (Note 3)	One 100 KB, 160 KB or 640 KB internal drive	One (or two) 160 KB double-density drives	100, 160, 260, 320, 420, 480, 640, 800, or 960 KB
H/Z-89, Z-90 (Notes 1, 2) Z-89-37 H-17-4, H-88-9 (Optional) H/Z-37 (Notes 3, 4)	One 100 KB, 160 KB or 640 KB internal drive	One (or two) 640 KB, double-density external drives	100, 160, 640, 740, or 800 KB; 1.28, 1.38, 1.44 or 1.92 MB

NOTES: (1) When ordering an H-89, use -2 or -3 for desired CRT. (2) Z-90s include Z-89-37 Disk Controller. (3) When ordering an HS-77 or HS-37, use -1 or -2 for desired number of drives; Z-87s, Z-37s have two drives. (4) H-17-4 and H/Z-37 require Z-89-37.

Increase the disk storage capacity of your H/Z-89 or Z-90



Use single-sided 5.25" disk drives

Or higher-capacity double-sided drives



H-77/Z-87, H/Z-37 – up to 1.28 megabytes: You get excellent flexibility in system configuration and plug-in adaptability to H/Z-89, Z-90 Computers. The 5.25" disk drives mount vertically to take up less space, provide extremely accurate access to data.

Choose from kit or assembled models: Easy-to-build kits include a complete Heathkit assembly and operation manual. Choose the Z-87 or Z-37 that's right for you from the chart below. 120/240 VAC. Measures 8 $\frac{5}{8}$ " H x 8 $\frac{7}{8}$ " W x 15" D.

How to order external 5.25" disk storage for H/Z-89s, Z-90s

All disk systems below require either H-88-1 Hard-Sectored Disk Controller (included with H/Z-89) or Z-89-37 Soft-Sectored Disk Controller (included with Z-89), as listed (order from right, if needed).

Drives	On-Line Storage Capacity		Order Model Number		Shpg. wt.	Price
	With H-88-1	With Z-89-37	Heathkit	Z ⁹⁰ data systems		
One H-17-1 (Single-Sided)	100K bytes	160K bytes	Kit HS-77-1	—	34 lbs.	\$525.00
Two H-17-1 (Single-Sided)	200K bytes	320K bytes	Kit HS-77-2	—	47 lbs.	795.00
			—	Z-87-89, for H/Z-89 Z-87-90, for H/Z-90	28 lbs.	999.00
One H-17-4 (Double-Sided)		640K bytes	Kit HS-37-1	—	34 lbs.	795.00
Two H-17-4 (Double-Sided)	—	1.28 megabytes	Kit HS-37-2	—	47 lbs.	1295.00
			—	Z-37	28 lbs.	1699.00

H/Z-89, Z-90 owners: Upgrade for maximum storage!

You have five options to upgrade present H/Z-89s and Z-90s to gain additional disk storage:

1. Add the H-77/Z-87 Single-Sided 5.25" Floppy Disk System for up to 200K bytes (100K per drive) of additional storage.

2. Add the Z-89-37 Soft-Sectored Disk Controller Board to H/Z-89s to raise single-sided 5.25" disk storage capacity to 160 KB.

3. Add the Z-89-37, H-17-4 Drive and H-88-9 to increase internal storage capacity to 640 KB.

4. Add the Z-89-37 and H-77/Z-87 to add up to 320 KB of storage.

5. Add the Z-89-37 and H/Z-37 Disk System for up to 1.28 MB of additional storage.

NOTE: Compatible disk controller(s) required for each system. Z-90s have Z-89-37 Controller.

Disk storage accessories

Soft-Sectored Disk Controller Board for H/Z-89 Computers: Increases data storage capacity, allows use of H-17-4 and H/Z-37. Z-89-37, Assem., 4 lbs. . . **299.00**

Hard-Sectored Disk Controller Board for Z-90 Computers: Use only with H-17-1 Disk Drives. H-88-1, Assem., 3 lbs. . . **150.00**

Double-sided Floppy Disk Drive For H/Z-89s, Z-90s, H/Z-37s: Stores up to 640 KB on a single disk. Needs Z-89-37 above; also, H-88-9 (left) for internal use in H/Z-89s.

H-17-4, Assem., 5 lbs. . . **550.00**

Single-Sided Floppy Disk Drive for H-77/Z-87s Stores up to 160K bytes per disk when used with Z-89-37 Disk Controller above, 100 KB when used with H-88-1.

H-17-1, Assem., 5 lbs. . . **295.00**

Dust Cover: Protects H/Z-37, H-77/Z-87 from contaminants.

HCA-5-77, Shpg. wt. 1 lb. **14.00**

High-speed 125 Dot Matrix Line Printer is packed with valuable features

Prints at over 150 characters per second; its 33 graphics characters are compatible with most Heath/Zenith computers, terminals

Heavy-duty state-of-the-art design provides more features, assures long life and reliable printer operation.

Faster speed, versatile paper handling, quiet operation and rugged construction – all at a surprisingly low cost: The Heath/Zenith 125 prints the full 96-character ASCII set (upper and lower case, with descenders and underlining).

Quad tractor feeds with adjustable width: The 125 can handle standard edge-punched, single or multiple forms (up to six parts thick) or fan-fold paper.

Features variable pitch: Prints 10, 12, 13.2 or 16.5 characters per horizontal inch, with six or eight lines per inch vertical spacing available.

Interfaces with most computers and terminals: Has RS-232C or 20 mA current loop interfacing, with handshaking adjustable by reverse channel and busy control signals. Communication speeds are adjustable from 110-9600 baud. "Paper out" and "jammed" indicators, self-testing capabilities are included. 120/240 VAC, 50/60 Hz. 8.25" H x 26.5" W x 18.5" D.

Heathkit Kit H-125, Printer Kit in H/Z-100 colors, Shpg. wt. 85 lbs. 899.00

Z-125, Assembled Printer in H/Z-100 colors, 82 lbs., Mtr. Frt. Collect 1499.00

HDC-125, Dust Cover for 125 Printer, 1 lb. 16.00

HCA-9, Partially assembled Desk-Level Printer Stand with wire paper tray, Shpg. wt. 21 lbs. 99.00



Cabinet completely encloses printing mechanism for quieter operation

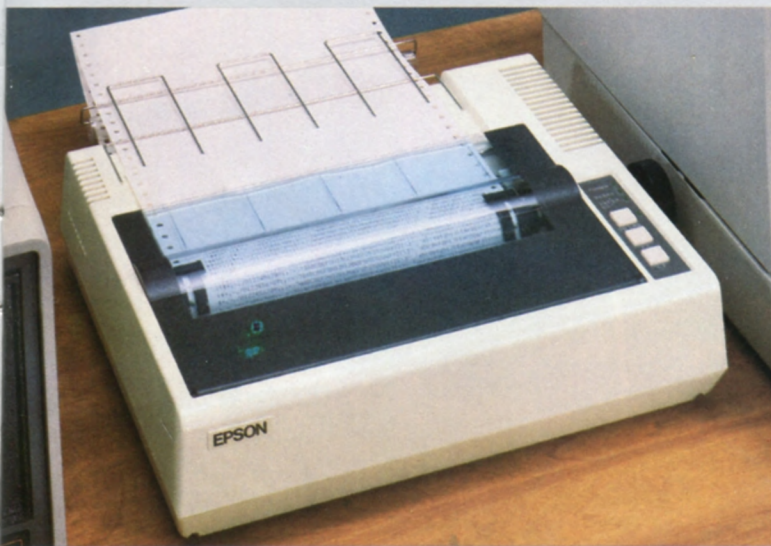
Quad tractor feed for positive, accurate control of paper

Uses plug-in, no-mess ribbon cartridges for clean, easy replacement



The high-performance 125 dot matrix printer is available in easy-to-build kit or assembled forms, in colors to match the H/Z-100 Series Computers





**Good performance at an affordable price
– buy the compact MX-80A Line Printer**

Now prints 12 additional line graphics characters: Also prints subscripts, superscripts, italics, underlining, and the full 96-character ASCII set.

Throughputs a fast 46 lines/minute (using 80-character lines): Pick 40-, 64-, 80-, or 132-character lines, four distinct modes for 12 printing combinations.

Includes Centronics-style 8-bit parallel interface: For H/Z-100 Computer (needs HCA-20, p. 18) and ZT-1 (needs ZTA-1-1, p. 15). Communicates with H/Z-89 via optional MX-80-3 232C Serial Interface below (needs HCA-10, p. 18), or the Z-89-11 I/O Board, p. 9 (needs HCA-14, p. 16, and CP/M 2.204 – available Aug. – or custom software). 120 VAC. 1¼" H x 14¾" W x 12" D.

MX-80A, Assembled, Shpg. wt. 17 lbs. 499.00

MX-80-3, Buffered RS-232C Serial Interface for MX-80, Shpg. wt. 1 lb. 135.00

Features bi-directional printing, advanced logic seeking in 12 combinations to maximize throughout	while hundreds of shell neighborhoods. 2 -04-82 04:50 aed World News Summary By United Press Interna
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Upgrade ROM Set: Adds graphics capabilities to older MX-80's. Not for use with MX-80-2.

MX-80-4, Shpg. wt. 2 lbs. 60.00

Dust Cover for MX-80 and MX-80A Printers: Protects unit from airborne contaminants.

HCA-5-80, Shpg. wt. 1 lb. 14.00



**Letter-quality Diablo Printer
is ideal for word processing systems**

Ideal for word processing, other applications requiring high-quality printing: Uses metal, plastic print wheels – allowing you to utilize durable metal print wheels with high-production word processors.

State-of-the-art design: The Diablo 630 uses micro-processor technology and fewer moving parts for greater versatility and reliability.

Prints up to 35-40 characters per second (cps): Outputs full 96-character ASCII set (upper/lower case), utilizing bi-directional printing for maximum speed. Its RS-232C Serial Interface (compatible with Bell 102, 113, 212 and equivalent modems) runs at 110-1200 baud, and has a 256-byte print buffer.

Accepts forms up to 15.5 inches (39.3 cm) wide: Forms up to 27/1000 inch (0.0686 cm) thick can be accommodated. Includes friction platen, HCS-22 Print Wheel (Elite 12 w/unslashed zero) and HCS-51 Film Ribbon. 120/240 VAC. 9.25" H x 23.5" W x 15.75" D.

WH-54, Assembled, 70 lbs., Mtr. Frt. 2295.00

Uses both metal and plastic Diablo print wheels for maximum flexibility; fewer parts for maximum reliability	According to the Airc over 6,000 public use 1000 VORs, and 1100 No set up and maintain on the file handling rou modified.
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Bi-Directional Tractor Feed Assembly: For WH-54 (Diablo 630) and WH-44 (Diablo 1640) Printers. Dual tractors allow improved registration in word processing, graphics and other applications.

HCA-1, Assembled, Shpg. wt. 9 lbs. 259.00

Money-saving, time-saving video terminals



H/Z-29: affordable state-of-the-art VDT features detached keyboard design

Compatible with: ANSI, DEC VT-52, Hazeltine 1500A, H/Z-19 and Lear Siegler ADM-3A protocol – and has many attributes of the DEC VT-100 for even greater versatility.

Detached high-quality 91-key typewriter-style keyboard: Has separate 14-key numeric pad, N-key rollover for fast typists, auto-repeat on most keys. Generates std. 128-character ASCII set; alternate set available on per-character basis. Connects to monitor with 8' cable (included).

Improved video quality: Easy-on-the-eyes 25 line x 80 character 12" diagonal non-glare green display has characters as large as 8 x 10 dots.

LED status panel: Shows "power on," "keyboard lock," "off line," "caps lock." Clock tracks elapsed mainframe or time-sharing system time.

Easy-to-use, English-language set-up mode: Configure the H/Z-29 to fit your needs. Store set-up parameters in non-volatile memory.

Serial port allows use of peripherals: Communicate from 75-19,200 baud (some applications may require handshaking at 9,600 and 19,200 baud).

Available in easy-to-build, money-saving kit form: Meets FCC, UL and CSA stds. for home and business use. 120 VAC. Keyboard, 3" H x 18" W x 7¼" D; Video Monitor, 14" H x 15½" W x 14¼" D.

Heathkit Kit H-29, Shpg. wt. 41 lbs. . . . ONLY **599.00**

Z-29, Assembled and tested, 38 lbs. **849.00**

Z-29-1, Palm Rest to reduce fatigue, 1 lb. . . . **15.00**

Z-29-2, ROM Listing for H/Z-29, Wt. 4 lbs. . . . **25.00**



H-19 VDT has fast Z-80 microprocessor for efficient operation

Excellent capabilities for its price: The H-19 VDT is compatible with systems using the DEC VT-52 Terminal, and also with systems using an RS-232C Serial Interface. It has microprocessor intelligence for complete screen control – and its features help you operate at optimum efficiency.

Control 32 functions: Configure from keyboard, outside computer, or internal switches. The 84-key typewriter-style keyboard generates the entire ASCII set and 33 graphics characters, with eight user-function keys also available. A 12-key calculator-style numeric pad makes insertion of financial and mathematical data faster, easier.

Easy-to-see video display screen: The H-19 shows twenty-four 80-character lines (plus a software-controlled 25th line which can show system status or perform other functions). Make corrections or edit – anywhere on the screen – using direct or relative cursor addressing.

Non-glare or standard CRTs available: You can choose an easy-on-the-eyes non-glare green CRT, or the bright, standard white CRT. Both measure a big 12" Diagonally. The H-19 Video Display Terminal runs on 120/240 VAC power, drawing only 45 Watts. Designed to fit on a desktop, it measures 13" H x 17" W x 20" D (33.02 x 43.18 x 50.8 cm).

Heathkit Kit HS-19-2, Easy-to-build Video Display Terminal with non-glare green CRT, Shpg. wt. 52 lbs. . . . **549.00**

Heathkit Kit HS-19-3, Easy-to-build Video Display Terminal with standard white CRT, Shpg. wt. 52 lbs. . . . **549.00**

Low-cost Heath/Zenith Personal Information Terminal



Access a world of information!

Popular ZT-1 Series Information Terminal: Talk with many different information services. Easy to use, even without prior training.

Dials up to 26 phone numbers: Clock, 76-key keyboard, printer port. Video display comes with some models. FCC OK'd for home, business use. 120 VAC. 11.75" H x 16 1/4" W x 12" D, excluding monitor. Order from chart below.

ZT-1-2, Carrying Case, 2 lbs. 24.99

ZTA-1-1, Parallel Cable connects ZT-1 to Centronics-style printers like MX-80A, 1 lb. **25.00**

TM-1, ZT-1/1A Technical Manual, 1 lb. 50.00

NEW! 9600 baud, more features!

Has RS-232C serial port: Hook our new HT/ZT-10 and -11 series Terminals up to large computers, peripherals. Programmable one-key access to information services, and 300 baud modem, are also available – see chart below.

Meets FCC requirements for home and business use: Kits are easy to build. 120 VAC. 11.75" H x 16 1/4" W x 12" D, excluding monitor. Order from chart below.

ZVM-121, Monochrome Video Display for HTX/ZTX's, 18 lbs. **139.95**

HTX-10-1, Auto-dial and auto-answer 300 Baud Modem for HTX-10, ZT/ZTX-10, 1 lb. **69.95**

SAVE up to \$40 from separate prices – buy the Personal Information Terminal with a ZVM-121 Video Monitor!

Model:	Video Monitor?	Parallel Printer Port?	9600 baud RS-232C Serial Port?	300 baud Modem?	One-key Source access?	One-key CompuServe access?	Programmable one-key access?	Shpg. wt.	PRICE
Heathkit Kit HT-10	YES	YES	YES	NO	NO	NO	NO	36 lbs.	\$399.00
Heathkit Kit HTX-10	NO	YES	YES	NO	NO	NO	NO	10 lbs.	279.00
Heathkit Kit HT-1011	YES	YES	YES	YES	NO	NO	YES	44 lbs.	449.00
Zenith data systems ZT-1, Assem.	YES	YES	NO	YES	NO	YES	NO	32 lbs.	569.00
Zenith data systems ZTX-1 Assem.	NO	YES	NO	YES	NO	YES	NO	6 lbs.	449.00
Zenith data systems ZT-1A, Assem.	YES	YES	NO	YES	YES	NO	NO	32 lbs.	569.00
Zenith data systems ZTX-1A, Assem.	NO	YES	NO	YES	YES	NO	NO	6 lbs.	449.00
Zenith data systems ZT-10, Assem.	YES	YES	YES	NO	NO	NO	NO	32 lbs.	499.00
Zenith data systems ZTX-10, Assem.	NO	YES	YES	NO	NO	NO	NO	6 lbs.	399.00
Zenith data systems ZT-11, Assem.	YES	YES	YES	YES	NO	NO	YES	32 lbs.	579.00
Zenith data systems ZTX-11, Assem.	NO	YES	YES	YES	NO	NO	YES	6 lbs.	479.00

Top off your computer system with a Heath/Zenith video monitor

Whether you need a high-resolution color, medium-resolution color, or high-resolution monochrome video monitor, Heath/Zenith has a model from its complete video display line that's right for you.

You're assured of the best, easiest-on-the-eyes video displays, because Zenith is known worldwide for the outstanding quality it puts into its video products - before the name goes on.



High-resolution Monochrome Video Display

Available with amber or green CRTs; contemporary styling in H/Z-100 and IBM-compatible colors.

Performs as well as high-priced units: Accepts direct EIA monochrome video. Wide >15 MHz bandwidth and fast 50 nS rise time provide excellent character definition on the 12" diagonal 25 x 80 screen. 120 VAC. 11 $\frac{3}{4}$ " H x 16 $\frac{1}{4}$ " W x 12" D.

- ZVM-122, Assem. with amber CRT, 18 lbs. . . . 169.95
- ZVM-123, Assem. with green CRT, 18 lbs. . . . 139.95
- ZVM-121-1, ZVM-121/122/123 to IBM Cable, 1 lb. . . 5.00
- ZVM-121-2, ZVM-121/122/123 to TI Cable, 1 lb. . 15.00
- ZVM-123-2, Tilt Base for ZVM-122/123, 4 lbs. . . . 15.00

High-resolution Color Video Display

*Features outstanding
640 x 225 pixel
resolution and
attractive styling*



For systems demanding the best color video:

The 13" diagonal ZVM-135 takes direct RGB color video inputs. 25 x 80 screen. Extra-wide 20 MHz bandwidth, super-fast 20 nS rise time for great pictures. FCC and UL approved for home/office use. 120 VAC. 13 $\frac{1}{2}$ " H x 20" W x 15" D.

Heath/Zenith Color Video Displays:

ZVM-135, Assem., High-Resolution, 36 lbs. . . 649.00

ZVM-131, Assem., Medium-Resolution, 36 lbs. . 379.00

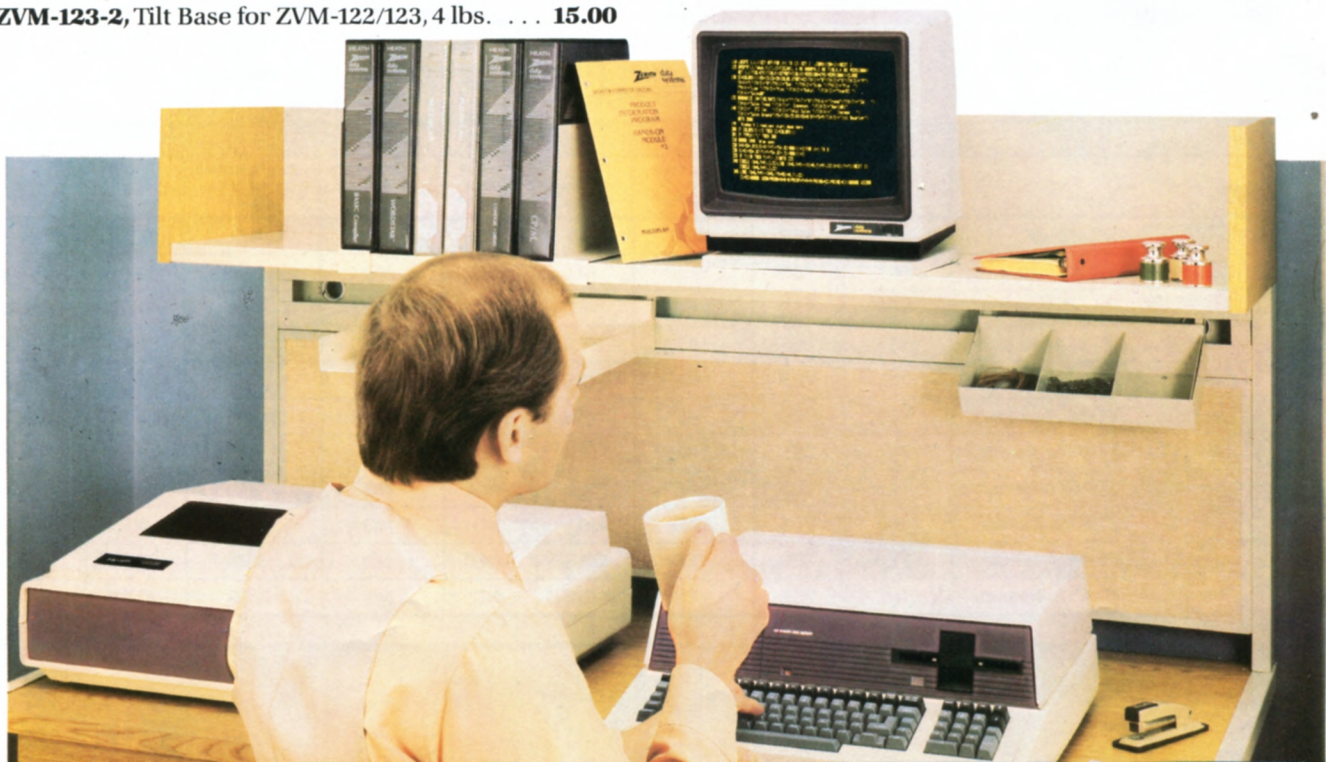
Cables for ZVM-135 and ZVM-131 Color Video Displays:

ZVM-135-1, for H/Z-100 Computer, 1 lb. 25.00

ZVM-135-2, for IBM PC, Shpg. wt. 1 lb. 25.00

ZVM-135-3, for Apple computers, 1 lb. 25.00

ZVM-135-4, for TI/Commodore models, 1 lb. . 25.00



Peripherals and accessories expand capabilities of Heath/Zenith computers

Acoustic Modem: ideal for any phone

Lets your computer exchange data with other computers



Has many practical and useful applications:

110-300 baud. RS-232C Interface. Powered by UL- and CSA-listed 120 VAC AC Adapter (included). Needs HCA-11 Cable (p. 18). 2 $\frac{3}{8}$ " H x 10" W x 5 $\frac{1}{2}$ " D.

WH-23, Assembled, Shpg. wt. 3 lbs. **139.00**

NEW! Lowest-cost Direct-Connect Modem

Sets new quality reliability and value standards – while keeping data distortion, loss and cost to a minimum.



Full-duplex communication at 300 baud: RS-232C Interface. Requires single-line phone with modular connectors and HCA-11 Cable (p. 18). 120 VAC transformer included. 5" H x 6 $\frac{1}{2}$ " W x 2" L.

WH-63, Assembled, Shpg. wt. 3 lbs. **99.00**

Auto-dial, auto-answer Smartmodem

Now available in 300- or fast 1200-baud versions, this versatile instrument is programmable from your computer



Our best modems: Hayes models automatically pulse or tone-dial and answer the phone. Use std. Bell 103 protocol, run at 110/300 baud. Connect to std. single-line modular phone systems. 120 VAC transformer included; HCA-11 (p. 18) needed. HUG software (p. 32) recommended for H/Z-100s; CPS (p. 24), for H/Z-89s/Z-90s.

WH-43, Assembled, 300 Baud, Shpg. wt. 3 lbs. **279.00**

NEW! 1200 Baud Version: Identical to above, but also supports standard Bell 212 1200 baud mode. Cuts the cost of your long-distance data calls up to 75%, and improves productivity.

WH-53, Assembled, 1200 Baud, 4 lbs. **695.00**

Hayes Chronograph adds time-keeping

Perfect for time-share, electronic mail, home/office security and many other applications



Keep your system up-to-date: Time/date for any RS-232C-compatible system. 120 VAC, with power failure battery backup. 2 $\frac{3}{8}$ " H x 5 $\frac{1}{2}$ " W x 9 $\frac{3}{8}$ " D. NOTE: Not supported by current software.

WH-42, Assembled, Shpg. wt. 4 lbs. **199.00**



1 Save \$76.00 on Type-'N-Talk Synthesizer
Your computer can talk to you, with an unlimited vocabulary: Just enter English text and hear electronic speech through a one-Watt, eight-Ohm speaker (amplifier included; external speaker not included). Uses one RS-232C port at 75 to 9600 baud.

Includes complete instructions: Now, most any computer enthusiast can use Type 'N Talk – it's fully software supported by Heath/Zenith. Requires HCA-13 Cable (p. 18). 120 VAC, 60 Hz. 3 $\frac{3}{8}$ " H x 7 $\frac{3}{4}$ " W x 5 $\frac{1}{4}$ " D (7.87 x 19.56 x 13.21 cm).

WH-12, Assembled, Shpg. wt. 5 lbs. **299.00**

2 TI LCD Programmer/Calculator

New, easier-to-read LCD display: Compact unit goes anywhere. Has special memory and logic functions. Rechargeable battery and 120 VAC adapter/charger are included. 5 $\frac{1}{2}$ " H x 3" W x 1 $\frac{1}{4}$ " D.

PC-12, Assembled, Shpg. wt. 1 lb. **79.95**

3 NEW! RS-232C I/O Line Tester: Cuts repair costs by helping pinpoint transmission difficulties before a technician is called. Monitors 12 different signals.

WH-15, Assembled, Shpg. wt. 1 lb. **119.00**

Surge Suppressor: Protects computer equipment from damage by transient voltage surges. UL Listed. 120 VAC, 60 Hz, 15 Amps. 1 $\frac{1}{4}$ " H x 2 $\frac{9}{16}$ " W x 1 $\frac{1}{4}$ " D.

HCA-16, Assembled, Shpg. wt. 1 lb. **65.00**

Paper Tractor: Inexpensively turns your tractor feed printer into a friction feed printing system. Uses most any paper. No modifications required.

HCA-17, Shpg. wt. 1 lb. **12.00**

Protective Floppy Disk Storage Cabinets

Plastic 5.25" Cabinet: Protects up to 50 disks from airborne contaminants. 5 dividers. Smoked glass cover. Cabinet measures 6 $\frac{1}{2}$ " H x 6 $\frac{3}{4}$ " W x 8 $\frac{1}{4}$ " D.

HCA-15, Shpg. wt. 2 lbs. **24.00**

Plastic 8" Cabinet: Protects 50 disks. 5 dividers. Smoked glass cover. 9" H x 9 $\frac{9}{16}$ " W x 10 $\frac{1}{2}$ " D.

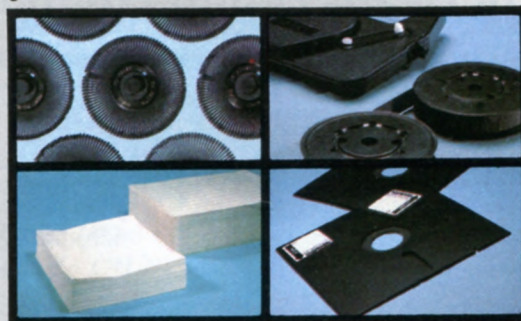
HCA-18, Shpg. wt. 5 lbs. **30.00**



Get top performance from your computer system with these high-quality Heath/Zenith supplies

Heath/Zenith offers this complete line of computer supplies to support its popular microcomputers, peripherals and software – as well as to support users of other microcomputers. These specially-selected products not only add flexibility and versatility to your computer system – they offer consistently high quality and reliable performance.

Whether you're looking for cables, printwheels, paper, ribbons or floppy disks – look to Heath/Zenith for a wide selection of the supplies and accessories you need – sold at affordable prices.



Pre-wired, 10' RS-232 Cables: Connects pins 1-8, 20.

HCA-10, Male to Male Cable, Shpg. wt. 1 lb.	20.00
HCA-11, Male to Female Cable, 1 lb.	20.00
HCA-12, Female to Female Cable, 1 lb.	20.00

Pre-wired, 10' special-application Cables:

HCA-13, Votrax Cable (connects H/Z-89 to WH-12 Type-N-Talk Speech Synthesizer), Shpg. wt. 1 lb.	20.00
HCA-14, Parallel Cable (for use with Z-89-11 I/O Board to connect H/Z-89 to MX-80 printer), 1 lb.	25.00
HCA-19, Bisynchronous Modem Cable for use with Z-89-11 Multi-Mode I/O Board, Shpg. wt. 1 lb.	20.00
HCA-20, Parallel Cable (to connect H/Z-100 Series Computers to MX-80A Printer), 1 lb.	25.00
ZTA-1-1, Parallel Cable (to connect ZT-1 Personal Terminal to MX-80A Printer), 2 lbs.	25.00

Large selection of durable plastic Diablo printwheels:

Courrier 10 (Diablo 38100). Pica with slashed zero. HCS-20, Shpg. wt. 1 lb.	8.00
Courrier 12 (Diablo 38107). Elite w/unslashed zero. HCS-21, Shpg. wt. 1 lb.	8.00
Elite 12 (Diablo 38102). Pica with unslashed zero. HCS-22, Shpg. wt. 1 lb.	8.00
General Scientific (D. 38141). Includes Greek letters, superscripts and mathematical symbols. HCS-23, Shpg. wt. 1 lb.	8.00
APL-10 Computer Language Font (Diablo 38150). HCS-24, Shpg. wt. 1 lb.	8.00
OCR-A (Diablo 38144). ANSI Standard OCR Type A font. HCS-25, Shpg. wt. 1 lb.	8.00
Prestige Elite Legal 12A (D. 38105). Has legal symbols, including (C), (R) and (TM). HCS-26, Shpg. wt. 1 lb. ...	8.00
Courrier Legal 10 (D. 38104). Pica w/legal symbols. HCS-27, Shpg. wt. 1 lb.	8.00

High-quality, long-lasting ribbons for printers:

Plug-in Cloth Ribbon Cartridges for Diablo Printers. HCS-50, Shpg. wt. 1 lb.	Package of three, 18.00
Plug-in Film Ribbon Cartridges for Diablo Printers. HCS-51, Shpg. wt. 1 lb.	Package of three, 18.00
Ribbons for H/WH-14 and ASR-33 Dot Matrix Printers. HCS-52, Shpg. wt. 1 lb.	Package of three, 8.00
Ribbons for WH-24 (TI 810) and H-36 (LA-36) Printers. HCS-53, Shpg. wt. 1 lb.	Package of three, 18.00

Plug-in Ribbon Cartridges for WH-34 DECWriter Printer.

HCS-54, Shpg. wt. 1 lb.	Package of three, 29.00
Plug-in, no-mess Ribbon Cartridge for MX-80 Printer. HCS-55, Shpg. wt. 1 lb.	14.00
Plug-in, no-mess Ribbon Cartridges for H/Z-25, Z-125 High-Speed Dot Matrix Line Printers. HCS-56, Shpg. wt. 3 lbs.	Package of two, 20.00

Top-quality, competitively-priced paper for printers:

Correspondence-Quality 8.5" x 11" One-Part, Fan-Fold Paper. Continuous form, 2700 sheets. Edge-punched. HCS-1, Shpg. wt. 28 lbs.	32.00
Standard 8.5" x 11" One-Part, Fan-Fold Paper. Continuous form, 3200 sheets, Edge-punched. HCS-2, Shpg. wt. 31 lbs.	32.00
Standard 14.875" x 11" One-Part, Fan-Fold Paper. Continuous form, 3200 sheets. For all Heath/Zenith printers except H/WH-14 and MX-80. Edge-punched. HCS-3, Shpg. wt. 47 lbs.	42.00

Reliable, high-capacity 5.25" and 8" floppy disks:

Hard-sectored, single-sided 5.25" Floppy Disks. Use with H-17-1 Drives, H-88-1 Disk Controllers. 100 KB. HCS-70, Shpg. wt. 1 lb.	Package of ten, 40.00
Soft-sectored, single-sided, double-density 48 tpi 5.25" Floppy Disks. Use on H/Z-89 with H-17-1 or H-17-4 Drives and Z-89-37 Controller. 160K bytes. HCS-66, Shpg. wt. 1 lb.	Package of ten, 45.00
Soft-sectored, double-sided, double-density 48 tpi 5.25" Floppy Disks. For H/Z-89 with H-17-4 Drives & Z-89-37 Controller. 320 KB. HCS-71, Shpg. wt. 1 lb.	Package of ten, 50.00
Soft-sectored, double-sided, double-density 96 tpi 5.25" Floppy Disks. For H/Z-100, or H/Z-89 with H-17-1 or H-17-4 Drives and Z-89-37 Controller. 640K bytes. HCS-68, Shpg. wt. 1 lb.	Package of ten, 55.00
Soft-sectored, single-sided single-density, 8" Floppy Disks. Use with H/Z-207, H/WH-27, H/Z-47, Z-67 and other disk systems. 250K bytes per disk. IBM 3740 format. HCS-69, Shpg. wt. 2 lbs.	Package of ten, 55.00
Soft-sectored, single-sided double-density, 8" Floppy Disks. For H/Z-207, H/Z-47, Z-67, others. 500 KB. HCS-64, Shpg. wt. 2 lbs.	Package of ten, 60.00
Soft-sectored, double-sided double-density, 8" Floppy Disks. For H/Z-207, H/Z-47, Z-67, others. 1 MB. HCS-65, Shpg. wt. 2 lbs.	Package of ten, 70.00

HEATH/ZENITH

Compatibility Chart

SOFTWARE

(Color shows operating compatibility)

	PROGRAM NAME	H/Z-100 SYSTEMS Optional 125 Printer (or letter-quality printer)	H/Z-89 AND Z-90 SYSTEMS Hard-sectored 5.25" floppy disk drives Optional 125 Printer (or letter-quality printer)	H/Z-89 AND Z-90 SYSTEMS Soft-sectored 5.25" floppy disk drives Optional 125 Printer (or letter-quality printer)	H/Z-89 AND Z-90 SYSTEMS 8" disk drives (H/Z-47 and Z-67) Optional 125 Printer (or letter-quality printer)
APPLICATIONS SOFTWARE	SuperCalc Spreadsheet				
	Multiplan Spreadsheet			(HS-37-2 or Z-37)	
	MicroStat Statistical Analysis Program (CP/M-80)				
	PT General Ledger (64K)			(HS-37-2 or Z-37)	
	PT Accounts Receivable (64K)			(HS-37-2 or Z-37)	
	PT Accounts Payable (64K)			(HS-37-2 or Z-37)	
	PT Inventory Management (64K)			(HS-37-2 or Z-37)	
	PT Sales Invoicing (64K)			(HS-37-2 or Z-37)	
	PT Property Management (64K)			(HS-37-2 or Z-37)	
	General Ledger II (HDOS)				
Small Business Inventory					
DATA BASE MANAGEMENT SOFTWARE	Condor rDBMS (64K, CP/M-80)				
	Condor File Manager (Z-DOS)				
WORD PROCESSING/ MAILING SOFTWARE	Magic Wand WP				
	Magic Spell Checker				
	WordStar WP				
	MailMerge Utility				
	WordMaster Text Editor (CP/M)				
	DataStar Manipulator (CP/M)				
	SuperSort Utility (CP/M)				
	PIE Full-Screen Text Editor				
	SOFTSTUFF Text Formatter (HDOS or CP/M-80)				
OPERATING SYSTEM/ LANGUAGE SOFTWARE	HDOS Operating System				(H/Z-47 only)
	CP/M-80 Operating System				
	CP/M-85 Operating System				
	UCSD P-System with Pascal				
	Z-DOS (MS-DOS) Op. System				
	MAC Macro-Assembler (HDOS or CP/M-80)				
	MACRO-80 Assembler				
	MBASIC Interpreter (CP/M)				
	MBASIC-80 Compiler (HDOS or CP/M-80)				
	C BASIC (CP/M)				
	Z-BASIC Color Language (Z-DOS)				
	Microsoft FORTRAN (CP/M)				
	Microsoft COBOL (HDOS or CP/M-80)				
UTILITY SOFTWARE	Computerized Phone Sys. (CPS)				
	HDOS to CP/M-80 File Converter (HDOS and CP/M-80)				
	IBM 3780 Emulator (CP/M-80)				
	IBM 3270 Terminal Emulator (CP/M-80)				
	Pearl Program Generator (CP/M-80)				
	DESPOOL Print Spooler (CP/M-80)				
SID/ZSID Debugger (CP/M-80)					
SOFTSTUFF SOFTWARE TOOLS					

(Note: Some programs may require additional hardware and software. Refer to specific program descriptions.)

HEATH/ZENITH 8-BIT APPLICATION SOFTWARE SOLUTIONS FOR YOUR MANY NEEDS

Our easy-to-learn software saves time by increasing efficiency – with fewer errors and less frustration.

Peachtree® business software includes CP/M-80 with Microsoft BASIC (where needed), and sample data for practicing. They need an H/Z-89 or Z-90 with 64K RAM, an H/Z-37 or H/Z-47 Disk System and a basic knowledge of accounting and computers. Most Peachtree software is also available for the H/Z-100; see pages 6 and 7. For a smooth transition, consultation with an accountant or data processing professional may be needed.



GENERAL LEDGER

Maintains your financial history: Designed to be the nucleus of your financial reporting system, Peachtree General Ledger helps you control expenses before costly business problems get out of hand. Keeps records of transactions and resulting balances, describes what happened during a given period.

Reports: Balance sheet summarizing all asset, liability and equity accounts; business-wide and departmental statements reporting income and expenses. Handles up to 32,167 records/file, 1,023 bytes and 127 fields/record, and 127 characters/field.

Provides comparative (current versus year-ago) financial data: Also produces end-of-month and end-of-year reports. Links fully to other Peachtree business accounting programs.

- **HRS-837-1 (Requires Sublicense Grant, p. 33),** on soft-sectored, double-density, double-sided 5.25-inch floppy disk to handle approximately 200 accounts and 6,600 transactions, 4 lbs. . . . **395.00**
- **HRS-847-1 (Requires Sublicense Grant, p. 33),** on soft-sectored 8-inch floppy disk for H/Z-47 Disk System to handle approximately 200 accounts and 11,000 transactions, Shpg. wt. 5 lbs. **395.00**

Peachtree is a registered trademark of Peachtree Software, Inc.



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AUTOMATED ACCOUNTING

Accounts Receivable: Complete invoicing and monthly statement generating system. Tracks current/aged accounts receivable. Maintains customer files – stores account type, balance, tax rate and other information. Checks credit limits, prints invoices and aging reports, keeps tax records. Links to General Ledger (left), Sales Invoicing (right) programs.

- **HRS-837-2 (Requires Sublicense Grant, p. 33),** on soft-sectored, double-density, double-sided 5.25-inch floppy disk, Shpg. wt. 3 lbs. **395.00**
- **HRS-847-2 (Requires Sublicense Grant, p. 33),** on soft-sectored 8-inch floppy disk for H/Z-47 Disk System, Shpg. wt. 4 lbs. **395.00**

Accounts Payable: Keeps track of both current and aged accounts payable. Maintains separate records for each vendor, processes vouchers. Helps determine amount of cash required to pay open invoices, which vouchers to pay, prints checks and a check register. Also processes payments, credits and adjustments. Links to Peachtree General Ledger program at left.

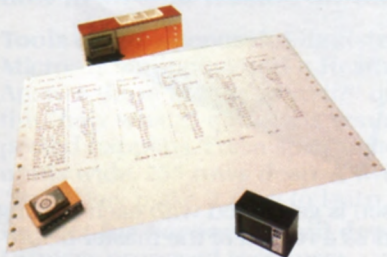
- **HRS-837-3 (Requires Sublicense Grant, p. 33),** on soft-sectored, double-density, double-sided 5.25-inch floppy disk, Shpg. wt. 4 lbs. **395.00**
- **HRS-847-3 (Requires Sublicense Grant, p. 33),** on soft-sectored 8-inch floppy disk for H/Z-47 Disk System, Shpg. wt. 2 lbs. **395.00**



Software for
the H/Z-89
Computer.



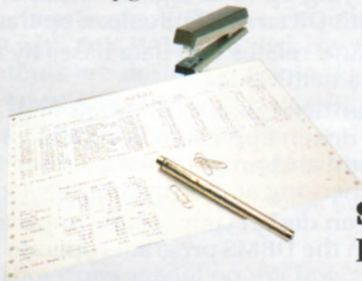
Software for
the H/Z-100
Computer.



INVENTORY CONTROL

Improves customer service and response time: Provides up-to-date information, better control of merchandise on hand. Allows more efficient operation, reduced inventory investment by each department. Keeps information on each item – including part number, description, vendor/reorder/activity data.

- **HRS-837-5 (Requires Sublicense Grant, p. 33),** on soft-sectored, double-density, double-sided 5.25-inch floppy disk to handle approximately 4,000 items, Shpg. wt. 3 lbs. **495.00**
- **HRS-847-5 (Requires Sublicense Grant, p. 33),** on soft-sectored 8-inch floppy disk (for H/Z-47 Disk System) to handle approximately 5,800 items, Shpg. wt. 5 lbs. **495.00**



SALES INVOICING

Helps you invoice quicker – so you're paid sooner: Checks credit limits and stock levels before printing invoice. Accommodates 36 different sales accounts; prints invoices, updates customer and inventory files; mixes taxable and non-taxable items on an invoice; provides for credit sales; and maintains files for complete sales tax reporting.

Interacts with General Ledger System on page 20: Sales Invoicing requires use of the Accounts Receivable (p. 20) and Inventory Control (above) programs.

- **HRS-837-6 (Requires Sublicense Grant, p. 33),** on soft-sectored, double-density, double-sided 5.25-inch floppy disk, Shpg. wt. 3 lbs. . . . **295.00**
- **HRS-847-6 (Requires Sublicense Grant, p. 33),** on soft-sectored 8-inch floppy disk for H/Z-47 Disk System, Shpg. wt. 4 lbs. **295.00**



PROPERTY MANAGEMENT SYSTEM

Manage your rental properties more effectively: The versatile Peachtree Property Management software system helps owners of rental units keep track of properties, leases and renters. It can even handle multiple leases per renter (such as apartment, garage and maintenance agreements).

Generates several action reports: These reports keep owners up to date on pending move-ins, upcoming move-outs and lease expirations.

Maintains financial data for rental properties: The Property Management software system keeps accounts receivable files – as well as printing invoices and statements for renters. The system provides instant, updated reports showing which of your renters have paid up to date – and which have not. Bring your property management up-to-date, using this powerful Peachtree software system.

- **HRS-837-7 (Requires Sublicense Grant on page 33),** on soft-sectored, double-density, double-sided 5.25-inch floppy disk for the high-capacity H/Z-37 Floppy Disk System, Shpg. wt. 4 lbs. **995.00**
- **HRS-847-7 (Requires Sublicense Grant on page 33),** on soft-sectored 8-inch floppy disk for H/Z-47 Disk System, Shpg. wt. 4 lbs. . . . **995.00**

CONDOR® DBMS

The Condor Series 20 Relational Data Base Management System lets you design your own custom data base program, even if you have little or no programming experience.

Create affordable, productive data bases quickly:

Condor DBMS is one of the first Data Base Management programming systems written for even the first-time computer user. It can bring incredible speed to, as well as greatly simplify, your information processing for: Inventory control, accounting functions, sales forecasting, personnel reporting and many other business applications.

Relational data base concept: A data base consists of many information files that work with one another to organize data according to your needs. Once the data is organized, simple English-type commands (such as "Sort Rollidex by last name") allow unrelated information to become dynamically related.

Condor features a relational structure that eliminates the need for a professional computer programmer to develop most data bases – it's much easier to use than a network or hierarchical system.

Features exceptional speed: Applications created with the use of Condor DBMS are written in Assembly Language – the language your computer understands best, so no time is wasted interpreting when you run the program – and is designed for implementation on CP/M-based computer systems with 64K of Random Access Memory. With the Condor Relational DBMS system, you have an impressive data base capacity:

- Up to 32,167 records per file.
- Up to 1,023 bytes in a record.
- Up to 127 fields per record.
- Up to 127 characters per field.

Other Condor DBMS features: Condor comes with a well-documented users' manual and complete, menu-drive HELP aids which make the system easier to use. It's transaction processing-oriented – posting transactions to a master data base. An audit trail



audit trail (result set) is generated with each posting, which may be used as a record of the master before posting.

Condor's self-contained, English-like data language eliminates the need for a host computer language, such as BASIC.

Complete batch operation, including conditional execution, repetition, user-defined messages and restart capability, speeds operation.

The FORMAT and DEFINE command permits creation of a new data base in minutes, while FORMAT also provides powerful screen editing capabilities for both data base development and report writing.

The COMPUTE command permits the inclusion of equations up to 32 terms long.

Condor's SELECT command allows you to select records by specifying up to 32 logical conditions – including the AND, OR and NOT Boolean operations.

The JOIN command relates two data bases by matching specified data item values.

Additional versatility: Condor DBMS lets you develop a menu-driven applications system without additional software and programming. It even has extensive error checking and error message facilities. This means you can design your custom applications program in which the DBMS programs operate "transparently" – that is, you are no longer conscious of the steps they cycle through automatically.

Hardware, software needs: H/Z-89 or Z-90 with 64K RAM, two high-capacity disk drives, CP/M-80, printer.

- **HCD-8937-1**, on soft-sectored, double-density, double-sided 5.25" floppy disk for CP/M-80 (requires H/Z-37 Floppy Disk System), Shpg. wt. 4 lbs. **650.00**
- **HCD-8947-1**, on soft-sectored 8" disk for CP/M-80, Shpg. wt. 4 lbs. **650.00**

For an H/Z-100 version of Condor DBMS, as well as the new Condor File Manager for the H/Z-100, see page 7.

Condor is a registered trademark of, and is marketed pursuant to a license from Condor Computer Corp.



ORDER TOLL-FREE! 800-253-7057

In AK, HI and MI call 616-982-3411

MULTIPLAN

The powerful 16-bit electronic spreadsheet, now in an 8-bit version for the H/Z-89 and Z-90.

Tools of the successful decision-maker –

Microsoft Multiplan and a Heath/Zenith computer: Answer those tough “what if?” questions, as well as the “now what?” questions you ask when the unexpected happens. Form spreadsheets up to 63 columns wide, 255 rows deep. A two-volume manual, “Help” key make it easy to learn.

Perfect for corporate and departmental budgets:

Displays proposed responses – you decide what to do. Make several spreadsheets dependent on a master spreadsheet, or exchange information with other applications programs.

Some uses for MultiPlan:

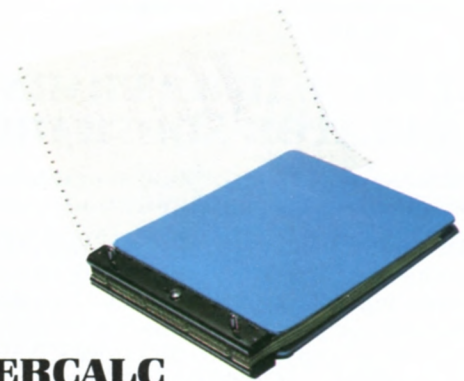
- Personal or business budget preparation
- Income tax calculations
- Sales reports
- Sales summaries
- Expense accounts
- Inventory pricing
- Cost estimating
- Compare budgeted and actual expenditures
- Inventory control
- Securities journal
- Costing model
- Internal forecasting
- Cash flow projections
- Balance sheet
- Financial analysis
- Profitability comparisons
- Corporate energy program
- Other applications

Min. hardware, software reqmts: An H/Z-89 or Z-90 with 64K RAM, two disk drives, CP/M-80. If printouts are desired, a printer is also needed.

- **HMS-837-7**, on soft-sectored 5.25" floppy disk for CP/M-80, Shpg. wt. 6 lbs. **250.00**

An H/Z-100 color version of Multiplan is on page 6.

Multiplan is a trademark of Microsoft Corp.



SUPERCALC

One of the most versatile eight-bit electronic spreadsheets, SuperCalc makes complex “what if?” and “now what?” calculations fast and easy.

Helps you make better use of your time and energy: Accountants, planners, business owners and engineers use SuperCalc to answer day-to-day “what if?” and “now what?” questions. They just enter new figures, and SuperCalc provides the answers.

Keep ahead of fast-changing business conditions: Manipulate data quickly – set up exactly what’s necessary for in-depth analysis and modeling. Examine and alter numbers and test with the 63 columns by 254 row SuperCalc spreadsheet.

Conditional calculations now possible: IF, AND, or NOT statements allow you to see all possible alternatives fast, with SuperCalc doing all the calculations in seconds instead of the hours it would take manually.

Formulas are always at your fingertips: You never have to operate in the blind. And you can protect unchanging factors (margins, multipliers, etc.) that are “givens” within your business or industry.

You get a super-wide 127-character column to work with: This eliminates hard-to-follow “wrap-around” formatting. Simply use the cursor control arrows to scroll horizontally to view on-screen.

SuperCalc’s unique “Help” function shows you what to do next at each stage: Just hit the red function key and you get a list of alternatives.

Replace your pencils, paper and calculator: SuperCalc needs an H/Z-89 or Z-90 with 48K RAM, one disk drive, CP/M-80. For printouts, a printer is also needed.

- **HSC-817-1**, on hard-sectored 5.25" floppy disk for CP/M-80, Shpg. wt. 2 lbs. **250.00**
- **HSC-837-1**, on soft-sectored 5.25" floppy disk for CP/M-80, Shpg. wt. 2 lbs. **250.00**
- **HSC-847-1**, on soft-sectored 8" floppy disk for CP/M-80, Shpg. wt. 2 lbs. **250.00**

A colorful H/Z-100 version of SuperCalc is on page 6.

Supercalc is a trademark of Sorcim Corp.

REMOTE IBM TERMINAL EMULATOR SOFTWARE

Permits your H/Z-89 or Z-90 to emulate various IBM data communications terminals

IBM 3780, 2780, 3741 and 2770 Emulator: Use in remote job entry, down-line loading and distributed processing network applications. Uses std. binary synchronous protocol. Needs H/Z-89 with 48K RAM and Z-89-11 I/O Board, one disk drive, CP/M-80.

- **HWI-8917-1**, on hard-sectored 5.25-inch floppy disk, Shpg. wt. 4 lbs. **895.00**
- **HWI-8947-1**, on soft-sectored 8" floppy disk, Shpg. wt. 4 lbs. **895.00**

SAVE \$50 – buy with Z-89-11! \$1045.00 separately.

- **HWI-8917-2**, hard-sectored 5.25" RBTE software and Z-89-11, 12 lbs. **ONLY 995.00**
- **HWI-8947-2**, soft-sectored 8" RBTE software and Z-89-11, 12 lbs. **ONLY 995.00**

IBM 3270 Emulator can effect substantial savings:

Allows H/Z-89 or Z-90 to work as popular IBM 3270 display station. Needs H/Z-89, Z-90 with 64K bytes of RAM, Z-89-11, one drive, CP/M-80, printer.

- **HPO-8917-1**, on hard-sectored 5.25-inch floppy disk, Shpg. wt. 2 lbs. **650.00**
- **HPO-8937-1**, on soft-sectored 5.25-inch floppy disk, Shpg. wt. 2 lbs. **650.00**

SAVE \$51 – buy with Z-89-11! \$800.00 separately.

- **HPO-8917-2**, hard-sectored 5.25" 3270 software and Z-89-11, 3 lbs. **ONLY 749.00**
- **HPO-8937-2**, soft-sectored 5.25" 3270 software and Z-89-11, 3 lbs. **ONLY 749.00**



COMPUTERIZED PHONE SYSTEM SOFTWARE

Puts a world of information on your computer system's video screen, inexpensively
Make your computer a window to a world of information: Information to help you plan your business, forecast, write more meaningful and accurate reports, complete much of your household paperwork—or play games.

Data communications interfacing utility program: CPS permits the transfer of data files between your computer and CompuServe or the Source. It also permits access to other non parity-sensitive computer systems, via modem. Store common commands (phone numbers, IDs and passwords) on disk, transmit at the press of a single button.

Both have large time-sharing mainframe computers: CompuServe and the Source provide features not available in a stand-alone microcomputer system. Access data files and programs in the CompuServe and Source libraries, send and receive electronic mail, get the latest news—access hundreds of information sources from your home!

Easy to use on most time-sharing systems: CPS features user-defined keys for auto log-in, mail check and more. Full error checking and an on-screen elapsed time clock are provided.

Minimum hardware and software requirements: An H/Z-89 or Z-90 with 48K RAM, one disk drive, a modem and HDOS and CP/M-80 (as listed below).

- **SF-9503**, on hard-sectored 5.25" disk for HDOS or CP/M-80, Postpaid **40.00**
- **SFS-9103**, on soft-sectored 5.25" disk for CP/M-80, Postpaid **40.00**



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WORD PROCESSING/MAILING

Word processing makes creation of documents faster and easier, in your home or at the office. Heath/Zenith offers two word processors – and an automatic proofreader for Magic Wand.



MAGIC SPELL AUTOMATIC PROOFREADER

Has distinct advantages over similar systems: With a typical Heath/Zenith computer and double-density floppy disk drives, Magic Spell can check 20 pages of text in under a minute. Use its standard 20,000-word English dictionary – or create specialized dictionaries of your own.

Easy to learn: Three self-instructional lessons, included with Magic Spell, help you utilize this software package's maximum capabilities. The software also has special "Help" displays, which provide quick answers to your questions.

Requires: H/Z-89 or Z-90 Computer with 48K bytes of RAM, one disk drive, CP/M-80 Operating System, Magic Wand Word Processor and a printer (letter-quality WH-54, page 13, recommended).

- **HIS-837-1**, on soft-sectored 5.25" disk for CP/M-80, 4 lbs. **295.00**



WORDSTAR WORD PROCESSOR

Best suited for letter-writing applications: WordStar Version 2.26 supports full on-screen text formatting (with automatic margination, justification and centering available on command). Helpful hyphenation speeds editing – lets you choose the hyphenation point.

Advanced capabilities supported: Supports automatic page numbering, many print enhancements, 1/48" line spacing, 1/120" character pitch and several other operator-chosen options, on printers with appropriate capabilities. Also supports print spooling on systems with 64K RAM.

Four prompting levels eliminate the need to refer to a manual. Needs H/Z-89 or Z-90 with 48K RAM or H/Z-100, two disk drives, CP/M,® printer (WH-54 recommended).

- **HMP-817-2**, on hard-sectored 5.25" disk for CP/M-80, Shpg. wt. 2 lbs. **395.00**
- **HMP-837-2**, on soft-sectored 5.25" disk for CP/M, Shpg. wt. 4 lbs. **395.00**
- **HMP-847-2**, SS 8" disk for CP/M, 5 lbs. **395.00**

A version of WordStar for the H/Z-100 is on pages 6-7.



MAILMERGE™ 2.26 FOR WORDSTAR

Create personalized form letters – or store and print a mailing label list: Combine a names/addresses file with a letter text file, inserting data where you want it. You can even produce both form letters and mailing lists from the same file.

Needs: H/Z-89 with 48K RAM or H/Z-100, two disk drives, CP/M, WordStar, printer (WH-54 recommended).

- **HMP-817-3**, on hard-sectored 5.25" disk for CP/M-80, Shpg. wt. 4 lbs. **135.00**
- **HMP-837-3**, on soft-sectored 5.25" disk for CP/M, Shpg. wt. 4 lbs. **135.00**
- **HMP-847-3**, SS 8" disk for CP/M, 4 lbs. **135.00**

See pages 6-7 for an H/Z-100 version of MailMerge.



MAGIC WAND WORD PROCESSOR

Now even more powerful and versatile: When you team Magic Wand Word Processing Software with the Magic Spell Automatic Proofreader, you get the ultimate in word processing convenience and accuracy.

Recommended for documentation, mailing list uses: Has sample learning exercises.

EDIT mode features insertion, deletion, search/replace, block moves and block copying, and the ability to include any pure ASCII file into your text.

PRINT mode has spooling, direct/imbedded commands, enhancements on capable printers, hyphenation, mail list merging. Needs H/Z-89 or Z-90 w/48K RAM or H/Z-100, one disk drive, CP/M, printer (WH-54 recommended).

- **HRS-817-9**, on hard-sectored 5.25" disk for CP/M-80, Shpg. wt. 3 lbs. **295.00**
- **HRS-837-9**, on soft-sectored 5.25" disk for CP/M, Shpg. wt. 4 lbs. **295.00**
- **HRS-847-9**, SS 8" disk for CP/M, 3 lbs. **295.00**

CP/M is a registered trademark of Digital Research Corp. WordStar, Mail Merge are trademarks of Micropro International Corp.

OPERATING SYSTEM SOFTWARE AND PROGRAMMING LANGUAGES

Because there's never a single answer, Heath/Zenith offers a choice of operating systems and programming languages to fit your specific needs.

Both industry standard and Heath/Zenith-standard operating systems are available, along with programming language interpreters and compilers designed for home, hobby, scientific/mathematical and business-oriented computer users.



Industry standard CP/M[®]-80 8-Bit Operating System

Used by over 200,000 microcomputer owners worldwide, CP/M-80 provides a common hardware interface – with uncommon flexibility.



Features: Industry standard CP/M-80, Heath Version 2.2.03 (Heath Ver. 2.204 will be shipped in August) opens the door to more languages, utilities and applications software programs.

File and disk management: CP/M-80 has fully dynamic named-file allocation, program and peripheral output control and random or sequential data access. Distinct programs can be stored in both source and machine-executable form.

The Basic Input/Output System (BIOS) provides operations to access disk drives and interface most standard peripherals. BDOS minimizes head movement and wear across the disk when accessing a file. Console Command Processor (CCP) has five commands which control input and output of programs.

Utilities: Has two-pass assembler, general-purpose editor, advanced 8080 debugger, file dump and copy between devices, system generation/relocation, more.

Hardware/software requirements: An H/Z-89 or Z-90 with 48K RAM and one disk drive (two drives are highly recommended).

Related educational course: EC-1120, page 34.

- HOS-8917-2, on hard-sectored 5.25" floppy disk, Shpg. wt. 5 lbs. 150.00
- HOS-8937-2, on soft-sectored 5.25" floppy disk, Shpg. wt. 5 lbs. 150.00
- HOS-8947-2, on soft-sectored 8" floppy disk for H/Z-47 Disk System, 5 lbs. 150.00
- HOS-8967-2, on soft-sectored 8" floppy disk for Z-67 Disk System, 5 lbs. 150.00

CP/M is a registered trademark of Digital Research Corp.

HDOS has many functions of larger operating systems

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Provides complete operating environment:

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Built-in utilities: 17 commands manipulate files, select device drivers, debug and run programs, edit text and more.

Hardware and software requirements: H/Z-89 w/48K RAM, one disk drive. Two drives are highly recommended, and may be required to use some other software products with HDOS.

- HOS-817-1, hard-sectored 5.25" disk, 9 lbs. 150.00
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UCSD P-System with Pascal, Ver. IV, responds to changing needs

Complete program development, execution environment: Has Pascal compiler, universal P-code interpreter, screen- and character-oriented program/text editors, macro-assembler and library of utilities. Support available from Softech Microsystems, San Diego, CA. Needs H/Z-89 or Z-90 with 48K RAM (64K recommended), two soft-sectored disk drives.

- HOS-8937-3, supplied on soft-sectored 5.25" disk, Shpg. wt. 7 lbs. 495.00
- HOS-8947-3, soft-sectored 8" disk, 7 lbs. . . 495.00



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Microsoft BASIC Interpreter

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Scores of utility, applications programs available: Extensive program editing facilities, double-precision math. Needs H/Z-89 or Z-90 with 48K RAM, one disk drive, HDOS or CP/M-80 (see below) and the Sub-license Grant (pg. 33).

Related educational course: EC-1110 on page 34.

- **H-8-21**, Ver. 4.82 on hard-sectored 5.25" disk for HDOS, Shpg. wt. 4 lbs. **150.00**
- **HMS-817-1**, Ver. 5.21 on hard-sectored 5.25" disk for CP/M-80, Shpg. wt. 5 lbs. **175.00**
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- **HMS-847-1**, Ver. 5.21 on soft-sectored 5.25" disk for CP/M-80, Shpg. wt. 5 lbs. **175.00**

Microsoft BASIC Compiler

Eliminate time-consuming interpretation: Compile your programs. Includes Microsoft BASIC library, MACRO-80 Assembler, LINK-80 Editor, CREF Cross-Reference Generator and LIB-80 Library Manager. Ver. 5.23 needs H/Z-89 or Z-90 with 48K RAM, two disk drives, HDOS or CP/M-80 (see below) and Sublicense Grant on page 33.

- **HMS-817-41**, HS 5.25" disk for HDOS, 5 lbs. **250.00**
- **HMS-837-41**, SS 5.25" disk for HDOS, 4 lbs. **250.00**
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Microsoft FORTRAN Compiler for science, engineering

Includes all features of ANSI FORTRAN X3.9-1966, except COMPLEX data type.

Requires an H/Z-89, or Z-90 Computer System with 48K bytes of RAM, two disk drives, the HDOS or CP/M-80 Operating System (as listed below), and the Sublicense Grant on page 33.

Related educational course: EC-1101, p. 35.

Microsoft FORTRAN Programming System, Version 3.35:

- **H-8-20**, on HS 5.25" disk for HDOS, 4 lbs. **175.00**

Microsoft FORTRAN-80 Programming System, Version 3.4:

- **HMS-817-2**, HS 5.25" disk for CP/M-80, 5 lbs. **195.00**
- **HMS-837-2**, SS 5.25" disk for CP/M-80, 4 lbs. **195.00**
- **HMS-847-2**, SS 8" disk for CP/M-80, 5 lbs. **195.00**



Powerful, business-oriented Microsoft COBOL Compiler

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Related educational course: EC-1105, page 35.

- **HMS-817-31**, HS 5.25" disk for HDOS, 4 lbs. **395.00**
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MACRO-80 Assembly Language

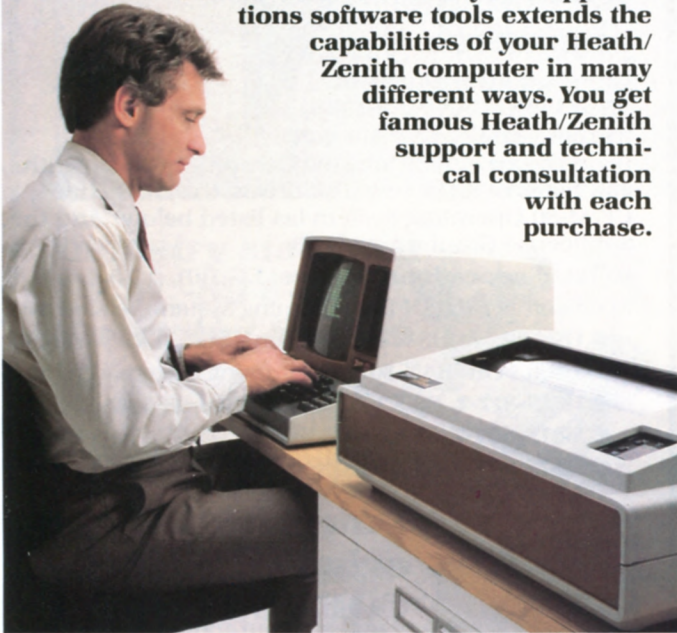
Has many "big computer" assembler features: Needs H/Z-89 or Z-90 with 48K RAM, or H/Z-100, one disk drive (two drives recommended), HDOS or CP/M Operating System and the Sublicense Grant on page 33.

Related educational course: EC-1108, page 35.

- **HMS-817-51**, HS 5.25" disk for HDOS, 2 lbs. **65.00**
- **HMS-837-51**, SS 5.25" disk for HDOS, 4 lbs. **65.00**
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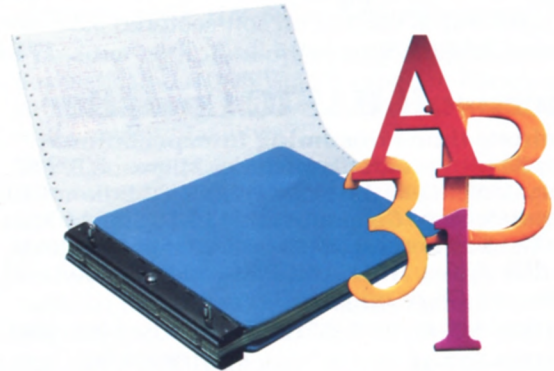
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This system keeps your books up-to-date easily and inexpensively – facilitating entry, maintenance, reporting and analysis of accounting data.



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Features: Custom chart of accounts for determining account names and numbers (using any numbering system – with or without decimal notation), a new account facility which lets you open new accounts at any time without disrupting the current transaction, account verification feature which prevents entries to non-existent accounts and reject account numbers already in use.

The system also provides one-keystroke data entry, automatic balance reporting to call up any balance during data entry and update balances when new transactions are entered, double entry and automatic entry checking to check debits and credits with each entry, audit trail for a source number and free-form description and comprehensive printouts upon request from the user.

Software compatibility: General Ledger II can be used with the SOFTSTUFF Small Business Inventory Package and Mailpro Mailing List Software.

Minimum hardware and software requirements: General Ledger II requires an H/Z-89 or Z-90 system with 48K bytes of RAM, two disk drives, the HDOS Operating System (see page 26) and the Microsoft BASIC Language Interpreter (see page 27).

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Small Business Inventory Package:

Designed to facilitate a complete analysis of any small business' inventory.



Features: Listing accepts alphanumeric part numbers up to 23 characters in length, as well as part descriptions up to 18 characters in length.

The system can provide up to 12 items of information on each part – including reorder level, usage history by month and year-to-date, and much more.

Software compatibility: Use with General Ledger II and Mailpro Mailing List Software Packages.

Minimum hardware and software requirements: The Small Business Inventory Package requires an H/Z-89 or Z-90 computer system with 48K bytes of RAM or a Z-100 series computer; one disk drive; the HDOS, CP/M-80 or CP/M(OS-53-2) Operating Systems (as listed below, see page 26); and the Microsoft BASIC Language Interpreter (see page 27).

- **SF-9005**, on hard-sectored 5.25" disk for HDOS, Postpaid **90.00**
- **SF-9105**, on hard-sectored 5.25" disk for CP/M-80, Postpaid **90.00**
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Minimum hardware and software requirements: The SOFTSTUFF PIE Full-Screen Text Editor requires an H/Z-89 All-In-One Computer System with 48K bytes of Random Access Memory (RAM), at least one floppy disk drive, and either the Heath Disk Operating System (HDOS) or the Heath/Zenith CP/M-80 Disk Operating System (as listed below).

- **SF-9200**, on hard-sectored 5.25" floppy disk for HDOS or CP/M-80, Postpaid **50.00**

UTILITY PROGRAMS

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Use to format text generated by the PIE Full-Screen Text Editor (page 30), or many other text editors: Performs errorless fill and justification (straight right margin) functions on editor-prepared text. Requires an H/Z-89 computer system with 48K RAM, one disk drive and HDOS or CP/M-80 (as listed below).

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Minimum hardware and software requirements: Roots-89 needs an H/Z-89 computer system with 48K RAM, one disk drive and HDOS or CP/M-80 (as indicated below).

- **SF-9008**, on hard-sectored 5.25" disk for HDOS, Postpaid **125.00**
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HDOS-CP/M-80 File Converter:

Transfer HDOS files to CP/M-80 disks – and vice versa. Now you can use ASCII data generated by HDOS software in CP/M programs, or use most CP/M data in HDOS programs. Requires an H/Z-89 computer system with 48K bytes of RAM, two hard-sectored 5.25-inch disk drives, HDOS and CP/M-80 Operating Systems.

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Typing Tutor:

No more hunt-and-peck typing – this educational program helps you learn faster, more efficient touch typing. Uses the H/Z-89's typewriter-style keyboard for immediate hands-on learning. The SOFTSTUFF Typing Tutor requires an H/Z-89 computer system with 48K bytes of Random Access Memory (RAM) and one hard-sectored 5.25-inch disk drive.

- **SF-9018**, on hard-sectored, bootable 5.25" HDOS disk, Postpaid **40.00**

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- **SF-9021**, on hard-sectored, bootable 5.25" HDOS disk, Postpaid **40.00**

Mychess Computer Chess Game:

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- **SF-9010**, on hard-sectored 5.25" disk for HDOS, Postpaid **40.00**
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HUG's support of one of the top users' group bulletin boards in the world, via MicroNet: The HUG Bulletin Board has the latest news on Heath/Zenith computer developments and HUG activities, on a daily basis. All you need is a HUG membership, a modem package and a MicroNet membership.

To join, return the application form below to HUG Membership, Hilltop Road, St. Joseph, MI 49085.



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